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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/837,824 | 04/18/2001 | Glen Davis | DGL-10002/15 | 9644 |

7590 07/20/2004

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| EXAMINER |
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WONG, STEVEN B

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| ART UNIT | PAPER NUMBER |
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3711

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DATE MAILED: 07/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/837,824

Applicant(s)

DAVIS, GLEN

Examiner

Steven Wong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

Detailed Action

This action is responsive to the Board of Patent Appeal's decision filed March 18, 2003 setting forth a new grounds of rejection under 37 CFR 1.196(b) and Applicant's amendment filed May 17, 2004. The applicant's amendment has overcome the new grounds of rejection set forth by the Board. However, the application has been reopened in view of the new grounds of rejection set forth below.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-3 and 5-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The language "elliptically extending" used in claims 1 and 10 in describing the upper and lower faces is unclear. It is unclear how the faces (14, 16) may be termed as elliptically extending when only a portion of an arc is depicted. Figure 3 shows the surfaces as being convex arcs, however, it is unclear how they may be defined and claimed as being part of an ellipse and not part of a circle. The arcs are depicted as only convex surfaces which could encompass both an ellipse and a circle.

Attention is also directed to the decision by the Board of Patent Appeals where they found the term "convex" to encompass not only elliptically extending surfaces, but also any number of other regular (e.g., circular) and irregular surfaces which are not elliptically extending (Decision at page 4). Therefore, because the only appropriate description for the surfaces (14,

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16) of the instant invention is convex, it is indefinite how the applicant can further state that the surfaces are elliptically extending.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1-3 and 5-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hand. Regarding claim 1, Hand discloses a set of water skipping articles comprising a three dimensional body (45) defined by upper and lower convex faces (41, 42) and a hollow interior cavity (57) formed by convex surfaces (49, 55). Insofar as the limitation for the upper and lower faces to be elliptically extending, Hand appears to teach this structure by providing a convex surface which appears to be elliptically extending (note rejection under 35 U.S.C. 112, second paragraph, stated *supra*).

Alternatively, it would have been obvious to one of ordinary skill in the art to form the upper and lower surfaces of Hand with elliptically extending surfaces, if not already, for purposes of aesthetic design. The applicant has failed to define any criticality for the claimed "elliptically extending surfaces" and it appears that the shape taught by Hand would accomplish similar purposes.

Regarding the limitation for the interior cavity to comprise elliptically extending surfaces, again Hand appears to teach his interior surfaces to be convex. It would have been obvious, if not already, to one of ordinary skill in the art to form the surfaces as elliptically extending surfaces for purposes of aesthetic design. The applicant has failed to define any criticality for the

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claimed surfaces to be elliptical and it appears that the convex shape taught by Hand would accomplish similar purposes.

Regarding claims 2 and 9, Hand discloses for the body to be formed from plastic, hard rubber or metal. These materials, particularly the plastic material, are seen as environmentally inert materials.

Regarding claims 3, 5 and 10, the drawings of Hand appear to show the claimed width to thickness ratios. A cursory measurement of Figure 1 of Hand reveals a width to thickness ratio of approximately 3.75:1 for the exterior surfaces and a width to thickness ratio of approximately 5.6:1 for the interior surfaces. Thus, it appears that Hand teaches the ratio limitations as set forth in claims 3, 5 and 10. One skilled in the art would review the overall teaching of Hand, including the drawings, as a means to make the invention. It would be well within the level of the ordinary skilled artisan, if not already, to form the device within the desired claimed ranges as set forth by applicant to simply make the device.

Regarding claims 6-8, it would have been obvious to one of ordinary skill in the art to modify the interior ratio or thicknesses and width for the convex surfaces to the instantly recited dimensions in order to alter the weight characteristics of the body.

5. Claims 2 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hand in view of Glovak et al. (4,151,997). Glovak et al. reveal a water skipping article formed from sand and a water soluble organic binder (column 1, lines 33-43). It would have been obvious to one of ordinary skill in the art to form the article of Hand from the materials of Glovak et al. in order to provide an environmentally friendly water skipping article.


Conclusion

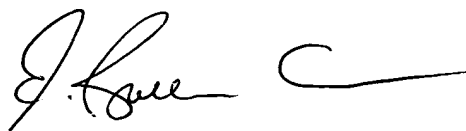
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven Wong whose telephone number is 703-308-3135. The examiner can normally be reached on Monday through Friday 7am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Vidovich can be reached on 703-308-1513. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SBW
July 12, 2004


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